14. An electroporation chamber for poration of biological particles, comprising: walls defining a fluid flow path;

electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical field; and

the apparatus being characterized by at least one of the walls defining the fluid flow path being elastically deformable and at least another one of the walls defining the fluid flow path being substantially rigid.

15. The electroporation chamber of Claim 14, wherein the electrical energy is pulsed.

- 16. The electroporation chamber of Claim 14, wherein the electrical energy is a variable flux.
- 17. The electroporation chamber of Claim 14, wherein the at least one of the walls defining the fluid flow path being comprised of a deformable, elastic material comprises two of the walls being comprised of a deformable, elastic material
- 18. The electroporation chamber of Claim 14, wherein the electrodes comprise continuous band electrodes.

19. The electroporation chamber of Claim 14, wherein the electrodes further function as a cooling device.

20. An electroporation chamber for poration of biological particles, the electroporation chamber being removably mounted to a support member, the electroporation chamber comprising:

walls defining a fluid flow path;

electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical-field-and

a mechanism for breaking the electrodes prior to the apparatus being removed from the support member whereby the apparatus cannot be re-used.

21. The electroporation chamber of Claim 20, wherein:
the electrodes are in electrical communication with a source of energy by a

spindle,

the electrodes being wrapped around at least a portion of the periphery of an associated spindle, and wherein the spindles are rotated so as to stretch the electrodes beyond their tensile limits, thereby breaking the electrodes and rendering them electrically inoperative.

22. An electroporation chamber for poration of biological particles, comprising: walls defining a fluid flow path;

electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical field;

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a pump for moving the biological particles along the fluid flow path; and a controller responsive to the rate at which the pump moves the biological particles along the fluid flow path and to the interval between pulses of electrical energy.

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23. The electroporation chamber of Claim 22, wherein the controller regulates the rate at which the pump moves the biological particles along the fluid flow path.

24. The electroporation chamber of Claim 22, wherein the controller regulates the interval between pulses of electrical energy.

25. An electroporation chamber for poration of biological particles, comprising: walls defining a fluid flow path;

electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical field.

26. The electroporation chamber of Claim 25, wherein the electrical energy is pulsed.

- 27. The electroporation chamber of Claim 25, wherein the electrical energy is a variable flux.
- 28. The electroporation chamber of Claim 25, wherein the electrodes comprise